

		WIRE SPACING TABLE	ABLE			
COMBINATION WOV	WOVEN WIRE & BARBED) WIRE FENCE		BARBED WIRE FENCE	RE FENCE	
48" FENCE	E HEIGHT	51" FENCE HEIGHT		48" FENCE	E HEIGHT	
32" WW-2 BW *	32" WW-3 BW *	39" WW-2 BW *	3 BW	4 BW	5 BW	6 BW
TYPE F2-32WW	TYPE F3-32WW	TYPE F2-39WW	TYPE F3	TYPE F4	TYPE F5	TYPE F6
51/2"			91	12"	12. 12. 12. 12. 13. 14. 14. 14. 14. 14. 14. 14. 14. 14. 14	
APPROXIMATE WEIGHT OF 32" WOVEN WIRE PER 20 ROD ROLL IS 150 LB. ±10 LB. • DENOTES STAPLE LOCATIONS	WOVEN WIRE FABRIC (832-6-12/2) B. ±10 LB. (NOTE: 12/2 GAGE) S	12/2) AGE)	APPROXIMATE WEIGHT OF 39" WOVEN WIRE FABRIC (939-6-12/2) PER 20 ROD ROLL IS 170 LB. ±10 LB. (NOTE: 12/2 GAGE)	T OF 39" WOVEN VIS 170 LB. ±10 L	WIRE FABRIC (939-1 B. (NOTE: 121/2 (6-12 ^{1/} 2) GAGE)

* OTHER WOVEN WIRE HEIGHTS AND NUMBER OF BARBED WIRE COMBINATIONS ARE AVAILABLE.

STAYS

- 1. USE WIRE STAYS ON ALL FENCES UNLESS WOOD STAYS ARE SPECIFIED.
- 2. LOCATE STAYS HALFWAY BETWEEN LINE POSTS.
- WIRE STAYS FOR BARBED WIRE FENCING ARE 2" LONGER THAN THE DISTANCE BETWEEN THE TOP AND BOTTOM WIRES.
- FOR WOVEN WIRE FENCING WITH BARBED WIRE ON TOP, EXTEND WIRE STAYS 6" MINIMUM BELOW THE TOP OF THE WOVEN WIRE. 4.
- WHEN WOOD STAYS ARE SPECIFIED, USE EITHER 2" ROUND, A ROUGH DIMENSION 2" \times 2", OR A 1½" \times 3½" (NOMINAL 2" \times 4"). THE STAY MUST BE OF SUFFICIENT LENGTH TO BE PLACED ON THE GROUND WITH THE TOP OF THE STAY EXTENDING 2" ABOVE THE TOP WIRE. ATTACH EACH WIRE TO THE WOOD STAYS USING 1¾" \times 9 GAGE STAPLES. WOOD STAYS DO NOT NEED TO BE TREATED. 5.

NOTES:

"M" DENOTES METAL POSTS, EG. TYPE F3M. "W" DENOTES WOOD POSTS, EG. TYPE F4W.

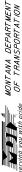
607-05 FOR SINGLE AND DOUBLE PANEL DETAILS. 607-10 FOR ADDITIONAL FENCING DETAILS. SEE THE STANDARD SPECIFICATIONS FOR POST REQUIREMENTS. SEE DTL. DWG. NO. SEE DTL. DWG. NO.

607-00 DETAILED DRAWING
REFERENCE DWG.
STANDARD SPEC. 607

NO.

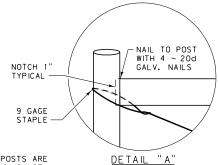
FARM FENCE

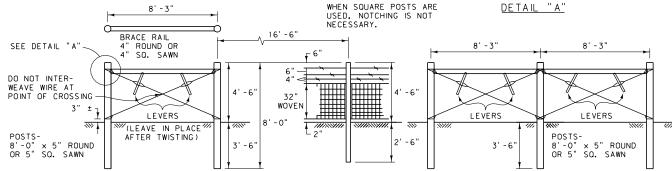
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BRACE WIRES - ONE CONTINUOUS 9 OR $12\frac{1}{2}$ GAGE SMOOTH WIRE DOUBLED TO FORM A FOUR WIRE BRACE. THE THE TWO ENDS NEAR THE TOP OF THE PANEL POSTS.

LEVERS - $1\frac{1}{2}$ " × 2" × 12" MINIMUM SIZE.





<u>SINGLE PANEL</u>

FOR PULLING, STRETCHING, CHANGES IN VERTICAL ALIGNMENT OR PANELS ON A RUN OF LESS THAN 330'.

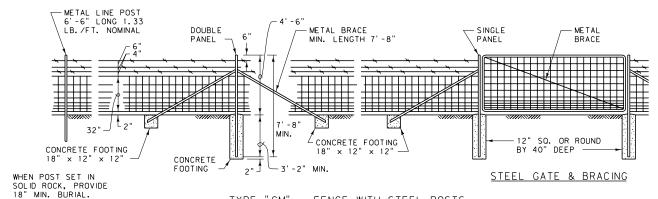
LINE POST

7'-0" \times 4" MIN. ROUND OR 4" \times 4" SQ. SAWN

DOUBLE PANEL

FOR CORNERS, PULLING OR STRETCHING, AND CHANGES IN HORIZONTAL ALIGNMENT.

TYPE "CW" - "STRAIGHT RUN" FENCE WITH WOOD POSTS



TYPE "CM" - FENCE WITH STEEL POSTS

NOTES:

SEE THE STANDARD SPECIFICATIONS FOR POST AND GATE REQUIREMENTS.

PLACE ALL FENCE WIRE ON PASTURE SIDE OF POST, EXCEPT ON CURVES. THEN, PLACE THE WIRE ON THE OUTSIDE OF THE CURVE.

IN AREAS SUBJECT TO HIGH VELOCITY WINDS AND MOVING DEBRIS, WIRES MAY BE PLACED ON WINDWARD SIDE OF POSTS, EXCEPT ON CURVES.

ALL CONCRETE IS CLASS "F" OR BETTER.

POST SPACING IS GENERALLY MEASURED PARALLEL TO GROUND.

LINE POST SPACING IS 16'-6" CENTER TO CENTER. LINE POST SPACING FROM BRACE OR PANEL POST IS 16'-6" CENTER TO CENTER.

PLACE 24" WIRE STAY HALFWAY BETWEEN POSTS. DO NOT PLACE STAYS ON PANELS FOR "CM" AND "CW" FENCE.

TYPE "CW" FENCE HAS ONE METAL POST IN PLACE OF A WOODEN LINE POST IN EACH 500' RUN FOR LIGHTNING PROTECTION.

USE TYPE "CW" (WOOD) PANELS ON ALL TYPE "CM" (METAL) FENCES INSTEAD OF STEEL PANELS UNLESS OTHERWISE SPECIFIED.

SET STEEL CORNER, END, GATE AND PULL POSTS, AND EACH BRACE IN CONCRETE AS SHOWN.

SEE DTL. DWG. NO. 607-10 FOR ADDITIONAL FENCING DETAILS.

A DEADMAN MAY BE A PRECAST CONCRETE BLOCK, A CAST IN PLACE CONCRETE BLOCK, A ROCK OR OTHER APPROVED OBJECT WEIGHING AT LEAST 150 LB. BURY THE DEADMAN IN THE GROUND WITH AT LEAST 2'-0" OF COVER. ATTACH THE DEADMAN TO THE FENCE WITH 3 STRANDS OF 9 GAGE WIRE OR 6 STRANDS OF 12½ GAGE WIRE. SEE DETAILED DRAWING NO. 607-10 FOR ALTERNATE DEADMAN.

STAPLE THE BOTTOM, TOP, CENTER AND ALTERNATE WIRES OF WOVEN WIRE TO WOOD LINE POSTS.

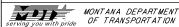
TIE THE BOTTOM, TOP, CENTER AND ALTERNATE WIRES OF WOVEN WIRE TO STEEL LINE POSTS.

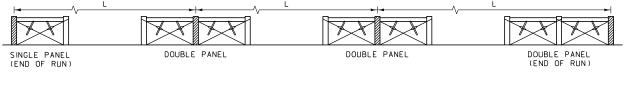
STAPLE ALL WIRES OF WOVEN WIRE TO WOOD CORNER POSTS OR POST USED TO TIE-OFF WIRE.

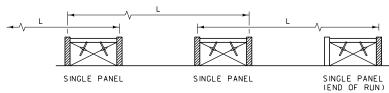
DETAILED DRAWING
REFERENCE DWG. NO.
STANDARD SPEC.
SECTION 607

INTERSTATE FENCE

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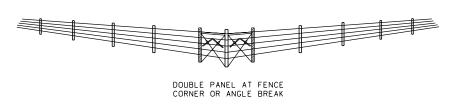




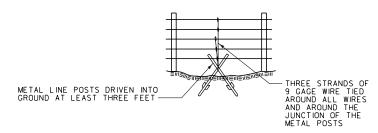


FENCE TYPE	RUN = L	PANELS REQUIRED
COMBINATION WOVEN BARBED	LESS THAN 33'	NONE
	33' - 330'	SINGLE
	OVER 330' TO 660' MAX.	DOUBLE
	LESS THAN 66'	NONE
BARBED	66' -660'	SINGLE
DARBEU	OVER 660' TO 990' MAX.	DOUBLE

NOTE: TIE OFF ON ALL CROSS HATCHED OR SHADED POSTS.



FENCE PANEL TYPES



<u>ALTERNATE DEADMAN</u>

WHEN APPROVED BY THE ENGINEER THE ABOVE DEADMAN MAY BE USED IN LIEU OF A ROCK OR PRECAST CONCRETE BLOCK AS SPECIFIED ON DTL. DWG. NO. 607-05.

NOTES:

ATTACH BARBED WIRES TO POSTS BY WRAPPING AROUND THE POST AT LEAST TWO TIMES, THEN WRAPPING AROUND ITSELF FIVE TIMES.

TO ATTACH WOVEN WIRE TO AN END POST, REMOVE TWO OR THREE VERTICAL STAY WIRES FROM THE END OF THE FENCE. PLACE THE FIRST COMPLETE VERTICAL STAY WIRE AGAINST THE POST. START AT THE MIDDLE OF THE HORIZONTAL LINE WIRES, WRAPPING AROUND THE END POST AT LEAST TWO TIMES AND THEN WRAPPING AROUND ITSELF FIVE TIMES.

DETAILED DRAWING

REFERENCE STANDARD SPEC. SECTION 607

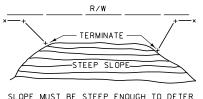
DWG. NO. 607-10

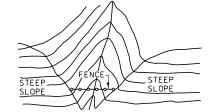
FENCING DETAILS

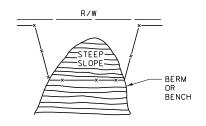
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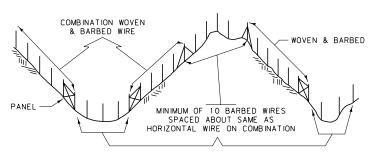


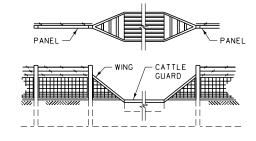




SLOPE MUST BE STEEP ENOUGH TO DETER PASSAGE OF TRESPASSERS.

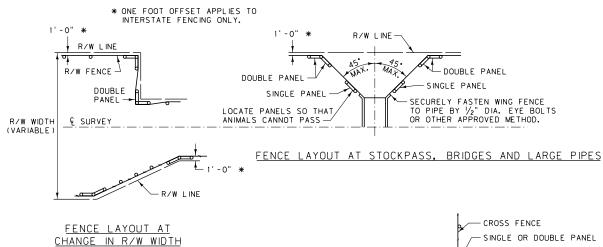
FENCE LAYOUT ON STEEP SLOPES

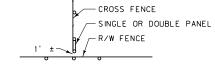


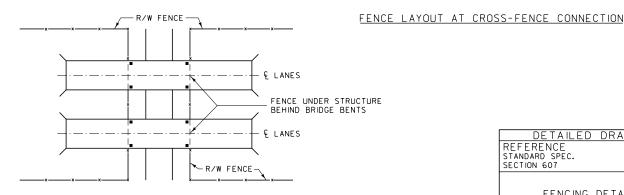


FENCE LAYOUT ON SHARP VERTICAL CURVES TO AVOID TRYING TO CONFORM WOVEN WIRE TO UNEVEN TERRAIN

FENCE CONNECTION TO CATTLE GUARD SECURELY FASTEN FENCE WIRE TO THE WINGS AND ARRANGE SO THAT ANIMALS CANNOT PASS.





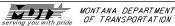


DETAILED DRAWING REFERENCE DWG. NO. 607-15

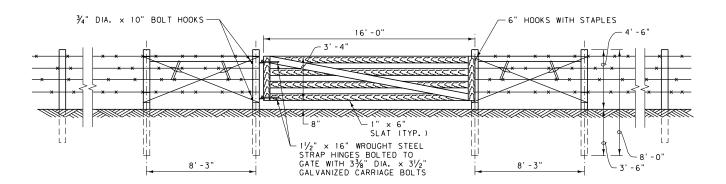
FENCING DETAILS

EFFECTIVE: FEBRUARY 2005

SECTION 607

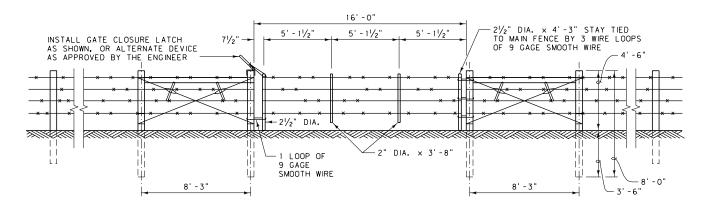


FENCE LAYOUT AT LOCAL ROAD UNDER INTERSTATE



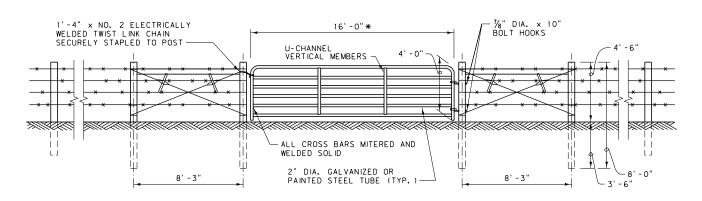
WOOD FARM ENTRANCE GATE (TYPE G-1)

NOTE: USE 10d NAILS AND CLINCH FOR GATE CONSTRUCTION.



WIRE FARM ENTRANCE GATE (TYPE G-2)

NOTE: USE SAME WIRE SCHEME ON GATE AS THAT USED ON FENCE, UNLESS STATED OTHERWISE IN R/W AGREEMENT.



METAL FARM ENTRANCE GATE (TYPE G-3)

NOTES:

ALL GATES ARE 16'-0" WIDE UNLESS R/W AGREEMENT STATES OTHERWISE.

ALL GATES WILL HAVE A SINGLE OR DOUBLE PANEL AT EACH END.

* TYPE G-3 GTATES ARE AVAILABLE IN WIDTHS FROM 4' TO 20' IN 2' INCREMENTS.

DETAILED DRAWING

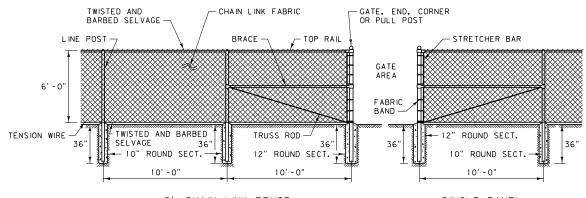
REFERENCE STANDARD SPEC. SECTION 607 DWG. NO. 607-20

FARM ENTRANCE GATES

EFFECTIVE: FEBRUARY 2005

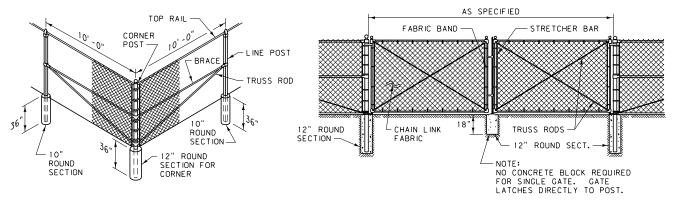


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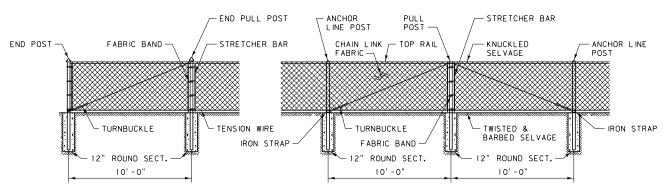
6' CHAIN LINK FENCE

SINGLE PANEL



DOUBLE PANEL
PULL POST AND CORNER POST BRACING

GATES



CHAIN LINK FENCE - 3', 4' AND 5'

NOTES:

SEE THE STANDARD SPECIFICATIONS FOR FURTHER REQUIREMENTS.

DO NOT INSTALL DOUBLE PANELS MORE THAN 300' APART ON TANGENTS OR MORE THAN 250' APART ON ANY CURVE. FOR CURVES SHARPER THAN 5', INSTALL A DOUBLE PANEL ON EACH CURVE END, PLUS ONE ADDITIONAL PANEL FOR EACH 10' OF DEFLECTION, EVENLY SPACED, BETWEEN THE CURVE ENDS.

PULL POST BRACING ON 6 FOOT FENCE IS THE SAME AS CORNER BRACING.

A DROP BAR LOCKING DEVICE IS REQUIRED FOR ALL DOUBLE GATE INSTALLATIONS. THE DROP BAR MUST BE ABLE TO BE INSERTED INTO THE CONCRETE BLOCK AT LEAST SIX INCHES.

HEIGHT OF FABRIC	WIRE FABRIC ABOVE GROUND	DEPTH OF CONCRETE	DEPTH OF POST IN CONC. (MIN.)
6'	1" TO 2"	36"	32"
5'	1" TO 2"	36"	32"
4'	1" TO 2"	30"	26"
3'	1" TO 2"	30"	26"

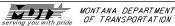
ALL CONCRETE IS CLASS "F" OR BETTER.

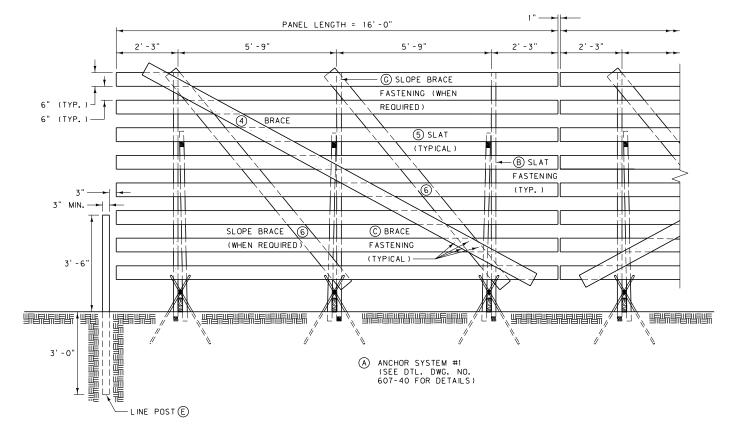
WHEN FENCE IS LESS THAN 50' FROM THE EDGE OF A DRIVING LANE, USE A 36" DIA. GALVANIZED STEEL CABLE IN PLACE OF THE TOP METAL BRACE RAIL.

DETAILED	DRAWING
REFERENCE STANDARD SPEC.	DWG. NO.
STANDARD SPEC. SECTION 607	607-25

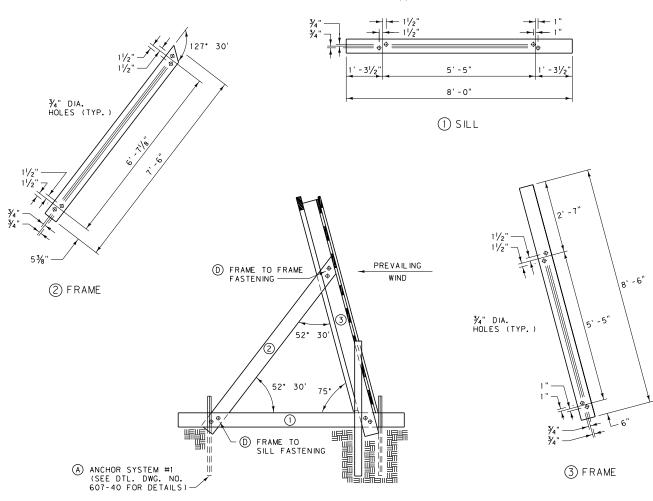
CHAIN LINK FENCE

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FRONT VIEW



END VIEW

GENERAL NOTES

- (A) ANCHOR SYSTEM DETAIL
 USE ANCHOR SYSTEM #1 UNLESS SOIL AND MOISTURE CONDITIONS NECESSITATE THE USE
 OF AN ALTERNATE SYSTEM, OR AS DIRECTED BY THE ENGINEER. CONSULT DETAILED
 DRAWING NUMBERS 607-40 AND 607-45 FOR ANCHOR SYSTEMS #3 (ROCKY CONDITIONS)
 AND #2 (SWAMPY CONDITIONS).
- (B) SLAT FASTENING FASTEN SLATS TO THE FRAME WITH 3 ~ 12d COMMON BARBED SHANK NAILS AT EACH LOCATION.
- $\ensuremath{\mathbb{C}}$ brace fastening fasten braces to the frame with 4 \sim 8d common nails at each location and clinch.
- $\stackrel{\textstyle \textcircled{1}}{\bigcirc}$ frame to sill and frame to frame fastening fasten the sill and frame members to the frame at each location with 2 \sim $^{1}\!\!\%$ Dia. \times 5" standard machine bolts, each with hex nut and two flat washers. See note $\stackrel{\textstyle \nwarrow}{\boxtimes}$ at right.
- (E) LINE POSTS
 PLACE LINE POSTS AT EACH END OF EACH LINE OF SNOW FENCE AS SHOWN. POSTS
 ARE 6'-6" LONG WITH A MINIMUM DIAMETER OF 3" AND A MAXIMUM DIAMETER OF 6".
 BUTT TREAT 3' MINIMUM.
- (F) WIRE TIE USE 12 GAGE OR HEAVIER GALVANIZED WIRE TO FORM THE WIRE TIES.

LUMBE	R - 8' S	NOW FENCE W/ ANCHOR	SYSTEM #1
BILL OF MATERIALS FOR ONE PANEL			
ITEM NO.	NO. OF PIECES	LUMBER SIZE	DESCRIPTION
1)*	3	2" × 6" × 8'-0"	FRAME (SILL)
2*	3	2" × 6" × 7' -6"	FRAME
3*	3	2" × 6" × 8' -6"	FRAME
* NOTE: PRESSURE TREAT ALL 2" × 6" MEMBERS (ENTIRE FRAME)			
4	1	1" × 6" × 16' -0"	BRACE
(5)	8	1" × 6" × 16' - 0"	SLAT
<u>6</u> **	2	2" × 6" × 10' -0"	SLOPE BRACE
** NOTE: USE ONLY WHEN SLOPE IS 5:1 OR GREATER			

}	TIANUN	BILL OF MATERIALS FOR ONE PANEL
	QUANTITY	DESCRIPTION
ľ	18	5%" DIA. × 5" HEX BOLT (THREADED FULL LENGTH) AND NUT
ı	36	FLAT WASHER FOR 5/8" DIA. BOLT
Ī	1 LB.	12d COMMON BARBED SHANK NAIL
ľ	12	#6 REBAR × 5'-0" (¾" DIA.)
	6 PIECES	12 GAGE TIE WIRE x 5'-0" ±
	√3 LB.	8d COMMON NAILS
ſ	1/4 LB.	16d COMMON BARBED SHANK NAILS

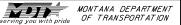
NOTE:

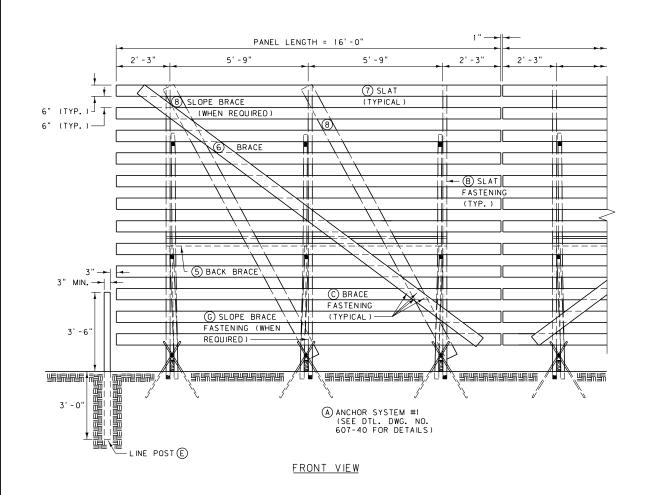
AFTER %" DIA. BOLTS HAVE
BEEN TICHTENED, BURR THE
THREAD DIRECTLY BEHIND THE
NUT TO PREVENT EVENTUAL
LOOSENING OF THE NUTS.

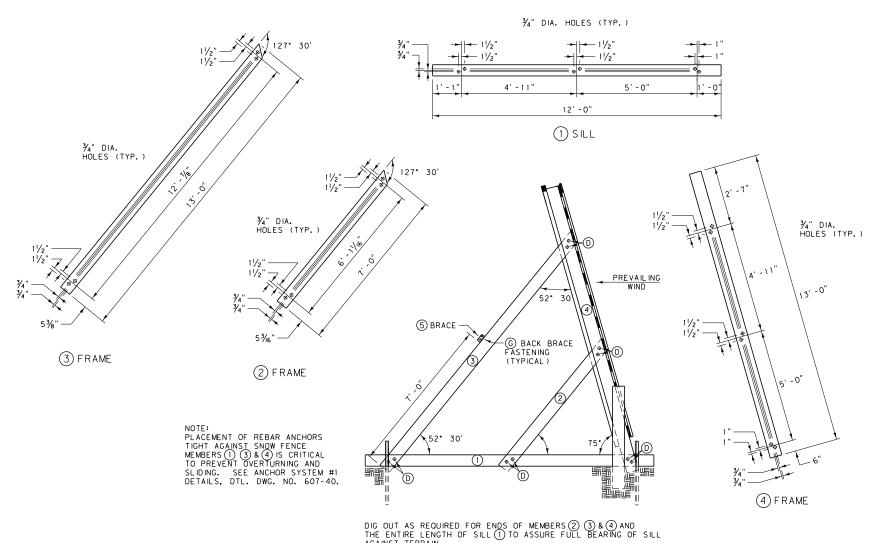
DETAILED DRAWING
REFERENCE DWG. NO.
STANDARD SPEC. 607-30

8' WOOD SNOW FENCE W/ ANCHOR SYSTEM #1

EFFECTIVE: FEBRUARY 2005







AGAINST TERRAIN.

GENERAL NOTES

- (A) ANCHOR SYSTEM DETAIL
 USE ANCHOR SYSTEM #1 UNLESS SOIL AND MOISTURE CONDITIONS NECESSITATE THE USE
 OF AN ALTERNATE SYSTEM, OR AS DIRECTED BY THE ENGINEER. CONSULT DETAILED
 DRAWING NUMBERS 607-40 AND 607-45 FOR ANCHOR SYSTEMS #3 (ROCKY CONDITIONS)
 AND #2 (SWAMPY CONDITIONS).
- (B) SLAT FASTENING FASTEN SLATS TO THE FRAME WITH 3 ~ 12d COMMON BARBED SHANK NAILS AT EACH LOCATION.
- ${\buildrel \hbox{\fontfastening}}\begin{picture}(60,0) \put(0,0){\line(0,0){100}} \put(0,0){\line(0,0)$
- $\stackrel{\textstyle \bigcirc}{\mathbb D}$ frame to sill and frame to frame fastening fasten the sill and frame members to the frame at each location with 2 \sim $^{\rm 16}$ Dia. \times 5" standard machine bolts, each with hex nut and two flat washers. See note $\stackrel{\textstyle \bigcirc}{\mathbb X}$ at right.
- (E) LINE POSTS PLACE LINE POSTS AT EACH END OF EACH LINE OF SNOW FENCE AS SHOWN. POSTS ARE 6'-6" LONG WITH A MINIMUM DIAMETER OF 3" AND A MAXIMUM DIAMETER OF 6". BUTT TREAT 3' MINIMUM.
- (F) WIRE TIE USE 12 GAGE OR HEAVIER GALVANIZED WIRE TO FORM THE WIRE TIES.
- 6 Back & slope brace fastening fasten back braces to the frame with 2 \sim 16d Nails, and fasten the slope braces with 3 \sim 16d barbed shank nails at Each Location.

LUMBER - 12' SNOW FENCE W/ ANCHOR SYSTEM #1				
BILL OF MATERIALS FOR ONE PANEL				
ITEM NO.	NO. OF PIECES	L UMBER SIZE	DESCRIPTION	
1)*	3	2" × 6" × 12'-0"	SILL	
2*	3	2" × 6" × 7'-0"	FRAME	
3*	3	2" × 6" × 13'-0"	FRAME	
4*	3	2" × 6" × 13' -0"	FRAME	
* NOTE: PRESSURE TREAT ALL 2" × 6" MEMBERS (ENTIRE FRAME)				
(5)	1	2" × 4" × 12'-0"	BACK BRACE	
6	1	1" × 6" × 18'-0"	BRACE	
7	12	1" × 6" × 16' -0"	SLAT	
<u>8</u> **	2	2" × 6" × 13'-0"	SLOPE BRACE	
** NOTE: USE ONLY WHEN SLOPE IS 5: 1 OR GREATER				

	HARDWARE - 12' SNOW FENCE W/ ANCHOR SYSTEM #1				
		BILL OF MATERIALS FOR ONE PANEL			
	QUANTITY	DESCRIPTION			
(D) (D)	30	%" DIA. × 5" HEX BOLT (THREADED FULL LENGTH) AND NUT -			
	60	FLAT WASHER FOR %" DIA. BOLT			
©	½ LB.	8d COMMON NAILS			
$^{\otimes}$	12/ ₃ LB.	12d COMMON BARBED SHANK NAILS			
©	√2 LB.	16d COMMON BARBED SHANK NAILS			
\bigcirc	12	#6 REBAR × 5'-0" (¾" DIA.)			
F	6 PIECES	12 GAGE TIE WIRE x 5'-0" ±			
	ALL NAILS MAY BE EITHER HAND DRIVEN OR DRIVEN WITH A PNEUMATIC NAILER.				

END VIEW

NOTE:

AFTER %" DIA. BOLTS HAVE
BEEN TIGHTENED, BURR THE
THREAD DIRECTLY BEHIND THE
NUT TO PREVENT EVENTUAL
LOOSENING OF THE NUTS.

DETAILED DRAWING
REFERENCE DWG. NO.

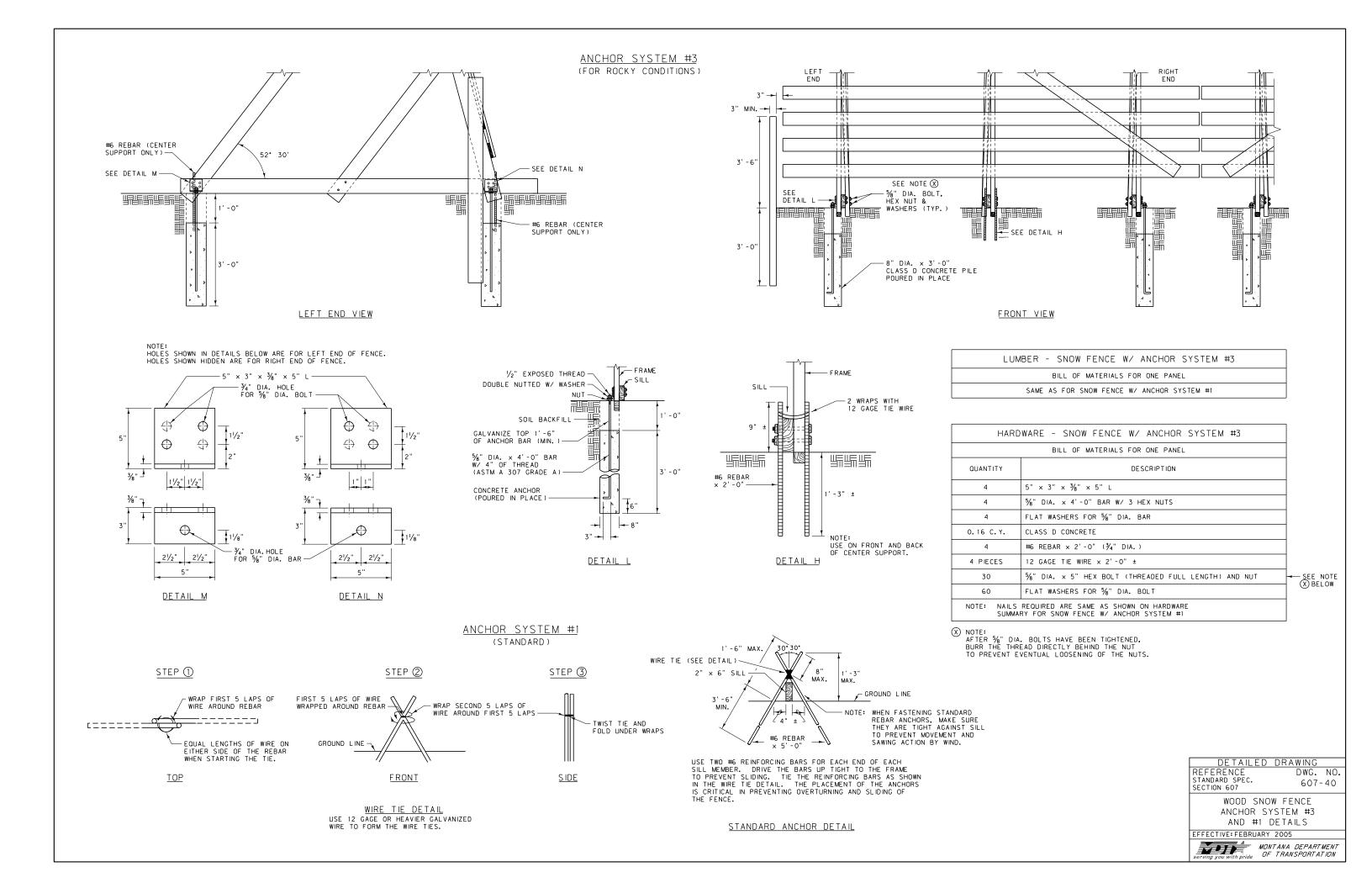
STANDARD SPEC.

12' WOOD SNOW FENCE W/ ANCHOR SYSTEM #1

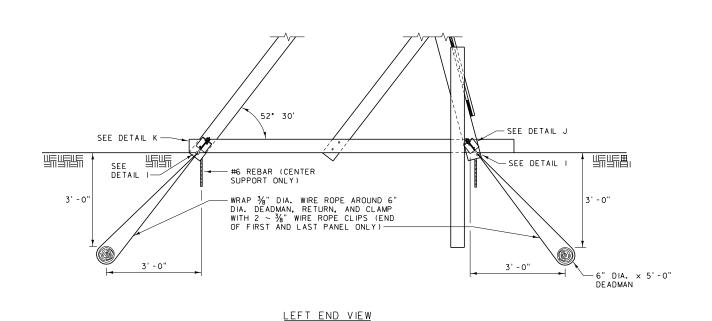
607-35

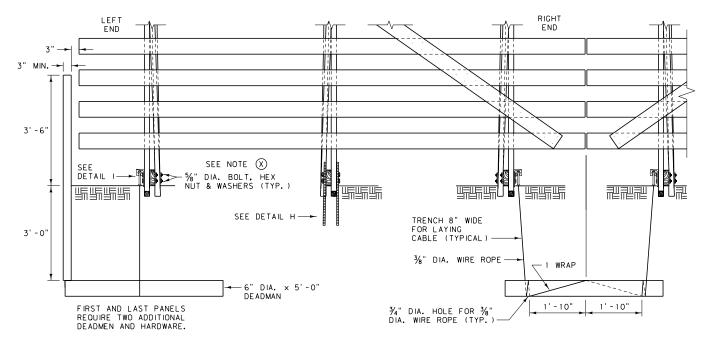
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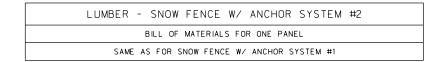


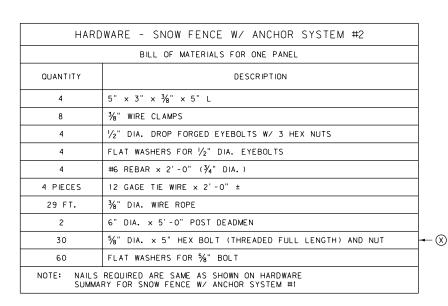
ANCHOR SYSTEM #2 (FOR SWAMPY CONDITIONS)

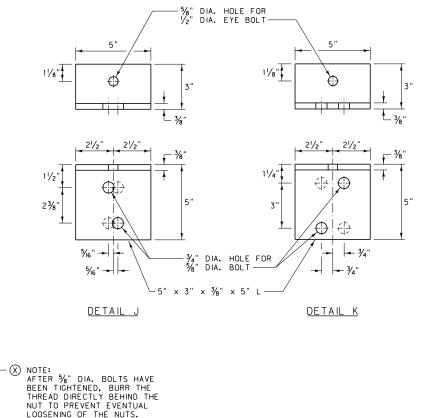




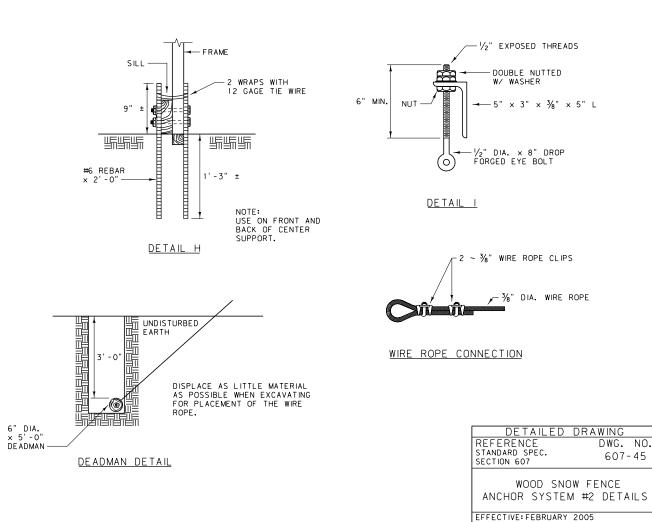
FRONT VIEW







HOLES SHOWN IN DETAILS BELOW ARE FOR LEFT END OF FENCE. HOLES SHOWN HIDDEN ARE FOR RIGHT END OF FENCE.



MONTANA DEPARTMENT

OF TRANSPORTATION